

# Call for Papers: Thermal and Fluids Analysis Workshop 2010 Innovating Technologies for Tomorrow through Teamwork Today



# JSC • 2010

#### **Conference Details**

The 2010 Thermal and Fluids Analysis Workshop, sponsored by the NASA Engineering Safety Center, and hosted by NASA Johnson Space Center will be held August 16-20, 2010 and general information is posted on http://tfaws.jsc.nasa.gov. This year's conference theme is: Innovating Technologies for Tomorrow through Teamwork Today.

# **Abstracts and Papers**

Papers, abstracts, or presentation proposals are solicited in the three technical areas of focus:
Passive Thermal Control, Fluids/Active Thermal/Life Support, and Aerothermal. There will also be an Interdisciplinary paper session. Papers focusing on this year's theme of teamwork enabling current or new technology innovations are encouraged.

Abstracts in AIAA style or Extended abstract style (see website for details) should include the following:

- A description of the paper or presentation to be submitted
- An indication of what is unique about the work
- An assessment of data, results and conclusions that are available
- A status of the state of the work (concept, development, testing, completed study)

Deadline for abstract submission via conference website is June 25, 2010 with final product submissions due July 23, 2010.

#### **Topics**

#### Passive Thermal

- Passive thermal systems & control: analysis, design and testing for space and aeronautics
- Spacecraft entry thermal protection systems, ablator systems
- Radiative heat transfer, analytical and experimental approaches
- Studies related to MLI, coatings, thermophysical/optical properties, and surface finishes

# Active Thermal/Fluids/Life Support

- Fluids and CFD: analysis, design and test for space and aeronautics
- Active thermal systems and control: components, thermal systems, analysis and testing
- Life support: environmental control and life support systems

#### Aerothermal

- Aerothermodynamics: analysis, design, and test for space and aeronautics
- Aeroheating environments: ascent, on-orbit, entry
- Plume impingement, on-orbit contamination
- Free molecular heat transfer, analytical and experimental approaches

### Interdisciplinary

- Technology innovations, current and indevelopment
- Multi-disciplinary analysis, design, and testing
- Creating environments of inclusion to enable innovation
- Lessons Learned

For more information about passive thermal, active thermal and aerothermal paper topics, go to <a href="http://tfaws.jsc.nasa.gov/">http://tfaws.jsc.nasa.gov/</a> website and select Call For Papers.

We are open to a broad range of topics related to thermal/ fluid systems, so please contact us if you are unsure which category you fall under. Note: full papers are encouraged but not required to give conference presentations.

# Registration

All authors/presenters must complete a registration form found online at the conference website.

# Clearance/Copyright

Submitted work must be **unclassified** and been cleared and approved for public release by the appropriate company and/or government agencies. Please allot time for this authorization process. Government employees are expected to have Document Availability Authorization (DAA) paperwork.

The submission must be original work from the author without any portion of the material infringing on any copyright.

The non-NASA employee verification form is on the website. This form **or** NASA DAA paperwork must be submitted by July 23, 2010. After this date, publication in the proceedings is not guaranteed.

#### Contact

Laurie Y. Carrillo, Conference Chair, NASA Email: laurie.y.carrillo[at]nasa.gov; Tel: 281-483-5831